

Requesting, Installing and Licensing sparkPrimatte on SGI and Linux Systems (Floating License Version)

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1. Installation of sparkPrimatte:

SGI Installation:

After you have downloaded the spark from the Imagica web site:

NOTE: If you have downloaded the spark, it will have to be expanded from a compressed state.

1. Change the current directory to the download directory.

```
% cd /(your download directory)
```

2. Expand the Primatte spark application.

```
% gzcat primatte.tgz | tar xf -
```

3. Install the Primatte spark

```
% ./INST_PRIMATTE
```

4. You will be offered the choice of installing either the 32 or 64-bit version. Please choose the correct one for your system.

5. You will be offered the choice of installing NodeLocked or Floating license versions. Please choose the correct one based on the license you have requested (or will request).

NOTE: Demo licenses are almost always NodeLocked licenses.

NOTE: This operation will also load some sample images and support files.

NOTE: Primatte should end up as sparkPrimatte.spark in the /usr/discreet/sparks/PRIMATTE directory.

6. Proceed to **Chapter 2. Getting and Installing a License Key.**

LINUX Installation:

After you have downloaded sparkPrimatte from the IMAGICA web site:

1. On the Linux system, log in as root.

2. Copy the downloaded spark into the default spark directory on the Linux system (usually /usr/discreet/sparks).

3. Go to the default spark directory:

```
> cd /usr/discreet/sparks
```

4. Extract files from the 'Primatte for Linux' tar archive:

```
> gunzip Primatte4.0_WEB_spark_x86.tar.gz
```

```
> tar xf Primatte4.0_WEB_spark_x86.tar
```

5. Change to the 'primatte' directory:

```
> cd primatte
```

6. Change the file permissions of the installer.pl file:

```
> chmod 777 installer.pl
```

7. Run installer script

```
> ./install.pl
```

NOTE: You will be offered the choice of installing either the 32 or 64-bit version. Please choose the correct one for your system.

NOTE: You will be offered the choice of installing NodeLocked or Floating versions. Please choose the Floating version.

8. Exit root user

9. Proceed to **Chapter 2. Requesting a Floating License Key.**

2. Requesting a Floating sparkPrimatte License Key

Requesting a Floating sparkPrimatte license for **SGI** systems:

NOTE: To request a license key from Imagica, you have to determine the system information number (in the 32-bit format) and the 'hostname' of the SGI server system.

- To get the system information number, open a shell window in IRIX and type:

```
% /etc/sysinfo -s
```

- To get the system's 'hostname', type:

```
% hostname
```

- Fill out the form at the end of this manual with these two pieces of information and FAX or e-mail it to Imagica and they will send you a temporary license key for your system. You can also log onto the Primatte web site (<http://primatte.com>) and request a license in that manner.

Requesting a Floating sparkPrimatte license for **Linux** systems:

NOTE: On a Linux system IMAGICA needs the **Imhostid** and the **hostname** to generate a floating license key. To generate this information, you must install the Linux-based **Primatte FlexNET License Manager**.

This utility application can be found on the Linux "Downloads" page on the www.primatte.com web site and is labeled as **Floating License Manager (??-bit Linux) for Primatte V4**. Choose either the 32 or 64-bit version depending on the configuration of the Linux operating system that will host the license server and download it to a known location and follow these steps.

a. Unzip and untar the `imagica_flexnet_server_x86.tar.gz` file:

```
% gunzip imagica_flexnet_server_x86.tar.gz
```

```
% tar xf imagica_flexnet_server_x86.tar
```

b. Then type:

```
% cd imagica_flexnet_server
```

c. Make sure you are logged in as 'root':

```
% su (enter password)
```

d. Change permissions on the installer script by typing:

```
% chmod 777 install.pl
```

e. Run the installer script by typing:

```
% ./install.pl
```

f. Go to the FLEXIm /bin directory:

```
% cd /imagica_flexnet_server/bin
```

g. Get the system's 'lmhostid':

```
% ./lmhostid
```

NOTE: The 'lmhostid' will be a twelve digit hexadecimal number.

h. Get the system's 'hostname':

```
% hostname
```

NOTE: The 'HOSTNAME' will be a text string.

i. At this time you can delete the Primatte4.0.10_WEB_spark_x86.tar and the /primatte installation directory:

```
% rm Primatte4.0.10_WEB_spark_x86.tar
```

```
% rm -rf primatte
```

j. Exit root user

Send this information to Scott Gross by e-mail (sgross@imagica-la.com) or FAX (1-530-677-9981) and he will send you a temporary license key for your system. You can also log onto the Primatte web site (<http://primatte.com>) and request a license in that manner.

3. Installing the sparkPrimatte License and Starting License Server Daemon (Linux):

NOTE: Prior to installing the license, you must install the License Server on a Linux system somewhere on the network. See step 2 above.

NOTE: This is only necessary to do on the Linux host server. Client system set-up is further down in the document.

1. The sparkPrimatte floating license key file is provided to you from Imagica and may have been FAXed to you or e-mailed. It will look something like this:

```
# License Generated on Fri Oct 20 2006
# Copy this entire license key including the lines with #s into the license file
SERVER boxx ANY
VENDOR imagicad
FEATURE sparkprimatte imagicad 4.0 permanent 1 SIGN="004D F5A7 46DD \
C9E4 5188 3E28 E871 6000 D928 03F6 A1E5 A49C 378D B7D7 3232"
```

2. Save the license in a file named 'license.dat' in the /var/flexlm/imagica/ directory and open permissions on it (chmod 777 license.dat).

NOTE: If you have already had a license file in that directory, append the top three text lines (the ones that begin with SERVER, VENDOR and FEATURE) of the new license file to the existing file. If the existing license file already includes the same SERVER and/or VENDOR lines, you may omit those two lines and just append the third (FEATURE) line.

NOTE: To run the license server startup script, you must have created a 'guest' login account. Do that now if you have not done so already.

NOTE: After you have created the 'guest' login account, you must make a change to the /etc/passwd file.

3. Using a text editor, open the /etc/passwd file and look for a line that looks like this...

guest:*:uid:gid:./home/guest:/bin/bash (if the guest account is named "guest")

4. Delete the asterisk " * " (or other character) after the guest account's name leaving just the two colons so it looks like this...

guest::uid:gid:./home/guest:/bin/bash"

5. Save the file.

6. Run the 'install post-processor script':

% /usr/imagica/etc/imagica_flexlm.start

NOTE: The service should be started automatically upon reboot. You should see a line saying "Starting License Daemon".

NOTE: If the daemon does not start, open the /var/tmp/imagica.log file and send it to sgross@imagica-la.com.

NOTE: A user has sent in the following suggestion regarding adding the 'guest' account and we include it in case it is relevant to your situation. Others have not had this problem.

In order to make the license server startup script work (/etc/init.d/imagica_flexlm) assumes that there is a guest user account. My system had no such account, so I had to change the following line to get it to start:

```
    /bin/su guest -c '/usr/imagica/bin/lmgrd -c  
    /var/flexlm/imagica/license.dat > /var/tmp/imagica.log'  
to  
    /usr/imagica/bin/lmgrd -c /var/flexlm/imagica/license.dat >/var/tmp/imagica.log
```

4. Installing a Floating sparkPrimatte License Key on a Linux or SGI client system:

NOTE: This is required to do on the Linux or SGI Client systems.

Once you have the license file in a remote license server and the license server is set-up and running, do this:

1. Create a license file on the client machine (i.e. the machine that is running Flame/Smoke/etc.) named /var/flexlm/imagica/license.dat. Open permissions on it (chmod 777 imagica/license.dat)
2. The contents of the file should be the 'SERVER' line from the license and then just add a 'USE_SERVER' line after it:

```
SERVER server_machine hostid  
USE_SERVER
```

For example:

```
SERVER bigboy 12738ab9  
USE_SERVER
```

3. Your floating license is now installed. Restart the Autodesk application and you should have access to the floating license version of sparkPrimatte. See the sparkPrimatte manual for instructions on how to use the spark.

5. If you have troubles...

5.1 The FlexNet Tools:

/usr/imagica/etc/imagica_flexlm.start - Install post-processor.

/usr/imagica/etc/imagica_flexlm.stop - Uninstall preprocessor

/usr/imagica/bin/imagica-daemon - Script to execute the daemon

/usr/imagica/bin/lmgrd - Daemon launcher

/usr/imagica/bin/lmdown - Daemon terminator

/usr/imagica/bin/lm* - Miscellaneous utility commands

/usr/imagica/bin/imagica-d - The vendor daemon

/var/flexlm/imagica/license.dat - The license file (distributed separately via e-mail).

5.2 Starting up the license daemon:

Automatic method:

NOTE: You will need to have a guest account to perform these operations. After you create the guest account, you will need to remove the password on it. Using a text editor, open the /etc/passwd file and look for a line that looks like this "guest:*:uid:gid:/home/guest:/bin/bash" (if the guest account is named "guest"). Delete the asterisk " * " after the guest account's name leaving just the two colons so it looks like this "guest::uid:gid:/home/guest:/bin/bash". Save the file.

- Run the Install post-processor script:

```
% /usr/imagica/etc/imagica_flexlm.start
```

- The service will now be automatically started upon reboot. You should see a line saying "Starting License Daemon".

NOTE: If the daemon does not start, open the /var/tmp/imagica.log file and send it to sgross@imagica-la.com.

Manual method:

NOTE: The license daemon remains in main memory to manage the licensing mechanism.

- After creating/appending the license file, restart the license daemon as follows:

```
% /usr/imagica/bin/imagica-daemon stop
```

```
% /usr/imagica/bin/imagica-daemon start
```

NOTE: If you run the 'stop' daemon command when the daemon is not running, this command will just display a "Shut down failed" message. There are no adverse effects to doing this.

5.3 Activating/deactivating the license daemon auto-execution function:

- To deactivate the license daemon auto-execution function, type:

```
% chkconfig imagica_flexlm off
```

NOTE: The daemon does not run automatically after the system reboots. Using the above command, you do not need to uninstall the imagica_flexlm system to deactivate.

- When you activate the daemon again, type:

```
% chkconfig imagica_flexlm on
```

NOTE: It is set to 'on' with the install program by default.

- It is however necessary to launch the daemon again after changing the 'chkconfig' switch:

```
% /usr/imagica/bin/imagica-daemon stop
```

```
% /usr/imagica/bin/imagica-daemon start
```

NOTE: The setting will not be switched until you will execute the command explicitly.

5.4 Uninstall procedure:

- To uninstall the Imagica flexlm system, open a shell window as superuser and type:

```
% /usr/imagica/etc/imagica_flexlm.stop
```

NOTE: This command erases the chkconfig entry and removes the related files in /etc/rc[02].d.

- After executing the above command, remove the imagica_flexlm package with the Software Manager (swmgr).

5.5 Troubleshooting:

- To restart the daemon:

```
% /usr/imagica/bin/imagica-daemon stop
```

```
% /usr/imagica/bin/imagica-daemon start
```

- Check for an error message.

- To verify the license:

```
% /usr/imagica/bin/lmdiag -c /var/flexlm/imagica/license.dat
```

NOTE: This command displays the vendor name, the imagica field, the application name and the version number. If you see a message "This license cannot be checked out", the license file has a problem. Check that it matches the license information e-mailed to you.

- To check the log information:

- The log for the imagica-flexlm system is stored in /var/tmp/imagica.log.

- Read the contents and check if any error messages have been recorded.

5.6 Utility commands

There are various utility commands in the FLEXlm system.

- lmcksum - checks typing errors in license.dat.

```
% /usr/imagica/bin/lmcksum -c /var/flexlm/imagica/license.dat
```

NOTE: You will see either an OK or BAD message.

- lmdiag - reports diagnostic message.

```
% /usr/imagica/bin/lmdiag -c /var/flexlm/imagica/license.dat
```

NOTE: If you will see "This license can be checked out", the license is adequate.

- lmdown - terminates the daemon

```
% /usr/imagica/bin/imagica-daemon stop
```

- Use the above command to terminate the daemon. lmdown is automatically invoked from the imagica-daemon script.

- lmgrd - launches the daemon

```
% /usr/imagica/bin/imagica-daemon start
```

- Use the above command to launch the daemon. lmgrd is automatically invoked from imagica-daemon script.

- lmhostid - report the host ID

```
% /usr/imagica/bin/lmhostid
```

- This command displays the host ID. (For example: The FLEXlm host ID of this system is "690caeca")

- lminstall - supports creating license files

- You can create a license file step by step with this tool. If your input is correct, you will see the message "Good" and you can then proceed.

- lmread - rereads from the license file

```
% /usr/imagica/bin/lmread -c /var/flexlm/imagica/license.dat
```

- You can refresh the latest license file information without terminating the daemon after changing the license.dat file.

- lmstat - displays the license status

```
% /usr/imagica/bin/lmstat
```

- This will display various information about the status of the license. Use the -a or -A option to get more detailed information.

NOTE: You can also use lmremove, lmswitchr, lmver. See the FLEXlm online manual ["/usr/imagica/flexlm/htmlman/TOC.htm"](/usr/imagica/flexlm/htmlman/TOC.htm) for more detailed information.

5.7 Recovering from errors.

Here are some error messages and the recovering procedure.

(a) The system cannot find the license file.

Checkout failed: Cannot find license file

The license files (or server network addresses) attempted are listed below.

Use LM_LICENSE_FILE to use a different license file, or contact your software provider for a new license file.

Feature: app

Filename: /usr/local/flexlm/licenses/license.dat

License path: /usr/local/flexlm/licenses/license.dat

FLEXlm error: -1,359. System Error: 2 "No such file or directory"

For further information, refer to the FLEXlm End User Manual, available at
"www.globetrotter.com".

Because : LM_LICENSE_FILE is not set or there is no license file.

To recover: Set LM_LICENSE_FILE correctly. Check that the license file exists.

See : Section 1.4 of this manual.

(b) The system cannot find the license server.

Checkout failed: Cannot find SERVER hostname in network database.

The lookup for the hostname on the SERVER line in the license file failed. This often happens when NIS or DNS or the hosts file is incorrect. Workaround: Use IP-Address (e.g.

123.456.789.123) instead of the hostname.

Feature: app

Hostname: serv

License path: @serv

FLEXlm error: -14,7

Because : LM_LICENSE_FILE is not set to a correct host name.

To recover: Set LM_LICENSE_FILE correctly.

See : Section 1.4 of this manual.

(c) There is no daemon running.

Checkout failed: Cannot connect to license server

The server (lmgrd) has not been started yet, or the wrong port@host or license file is being used, or the port or hostname in the license file has been changed.

Feature: app

Server name: serv

License path: @serv

FLEXlm error: -15,12. System Error: 146 "Connection refused"

For further information, refer to the FLEXlm End User Manual, available at
"www.globetrotter.com".

Because : LM_LICENSE_FILE is not set to a correct license server. Or the daemon is not running on the license server.

To recover: Set LM_LICENSE_FILE correctly. Or launch the daemon on the license server.

See : Section 1.4 of this manual.

(d) Tried to execute an application without a license.

Checkout failed: License server does not support this feature
Feature: app
License path: @serv
FLEXlm error: -18,147

Because : You tried to execute an unlicensed application.
To recover: Input correct information to the license file.
See : Section 1.2 of this manual.
(NOTE: If you have lost the license data, contact the software distributor.)

(e) Tried to execute too many applications at a time.

Checkout failed: Licensed number of users already reached
Feature: app
License path: @serv
FLEXlm error: -4,132

Because : You tried to execute more than licensed number of applications.
To recover: Order additional licenses.

(f) Incorrect version

Checkout failed: License server does not support this version of this feature
Feature: app
License path: @serv
FLEXlm error: -25,147

Because : You tried to execute an application version that is not supported.
To recover: Order a proper license.

(g) License expired

Checkout failed: Feature has expired
Feature: app
License path: @serv
FLEXlm error: -10,147

Because : You tried to execute an application with expired license. Or the system clock is not correct.

To recover: Order a proper license. Or adjust the system clock.